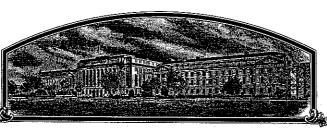
No.



9200223

THE UNITED STANTES OF ANTERIOA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Asgrow Seed Company

Colhereus, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF CIGhteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IN IMPORTING IT, OR EXPORTING IT, OR USING IT, IN PRODUCING A HYBRID OR DIFFERENT RIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT LAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'A2835'

In Lestimony Winerest, I have hereunto set my hand and caused the seal of the Plant Furity Protection Office to be affixed at the City of Washington, D.C. this 31st day of October in the year of our Lord one thousand nine hundred and ninety-four.

KUMPUN GVAP Commissioner Plant Variety Protection Office Agricultural Marketing Service

Clike EST Secretary of Agriculture

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Office, ORM, Room 404-W. Washington, D.C. 20250, and to the Office of Management and Budget, Paperwork Reduction Project (DMB #D581-0055). Washington, 20250.

U.S. DEPARTMENT OF AGRICULTURAL MARK	AGRICULTURE		40	plication is required in order to
APPLICATION FOR PLANT VARIETY (Instructions on	dei cec ini	defermine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).		
NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATE EXPERIMENTAL NO	N OR 3.	VARIETY NAME
Asgrow Seeed Company		XP2835	l A	2835
4 ADDRESS (street and no or R.F.D. no., city, state, and ZIP)		5 PHONE (Include area cod		FOR OFFICIAL USE ONLY
9646-190-19			PVI	O NUMBER
Gull road Buklding 190				9200223
Kalamazoo Michigan 49001		7	 	
	. •	616-384-2352		
6 GENUS AND SPECIES NAME	7 FAMILY NAME (Botanio			
Glycine Max	Leguminosae	· ·	Ğ	
8 CROP KIND NAME (Common Name)		DATE OF DETERMINATION	— f	
Soybean		990		1.2/20.
10 IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGA	ANIZATION (Corporation, part	nership, association, etc.)		7
Corporation		•	i d	1/1/.
TI IF INCORPORATED, GIVE STATE OF INCORPORATION	12 DA	TE OF INCORPORATION		: 13.25 <i>0.0</i> 0 - 1 -
D.J.,	† *			
Deleware 13 NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO	SM SERVE IN THIS APPLICATION	rch 22, 1968	1 1	, bec 3, 1997
·				EE 1777
Steve Hawkins 9635-190-23	•	Alan Walker		55-1777
616::384-2352		Asgrow Seed C	ompany	5926 Janesville,WWJ
Asgrow Seed Company Gull Road B	ulding 190 Ka	ILAMAZOO NIL 49	area code)	53546
14 CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (For a Known of the Variety Charlety Charlety)	ollow INSTRUCTIONS on rever	re)	2. 2	•
b. K Exhibit B. Novelty Statement				
c Exhibit C. Objective Description of Variety	•			
d Exhibit D. Additional Description of Variety	•			
e K Exhibit E, Statement of the Basis of Applicant's Owners				
Seed Sample (2,500 viable untreated seeds) Date See	ed Sample mailed to Plant \	/ariety Protection Office		
g Filing and Examination Fee (\$2,150) made payable to	*Treasurer of the United St	ales "		
15 DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE S Protection Act 1 YES (# "YES" answer dems 16 and 17 b		Y AS A CLASS OF CERTIFIED S IO, " skip (o item 18 below)	EED? (See se	ction 83(a) of the Plant Variety
16 DOES THE APPLICANTISI SPECIFY THAT THIS VARIETY BE LIMITED AS NUMBER OF GENERATIONS?		DITEM 16, WHICH CLASSES O	E PRODUCTIO	N BEYOND BREEDER SEED?
YES X NO	! _		•	
<u> </u>		INDATION	REGISTERE	D CERTIFIED
18 DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE V	VARIETY IN THE US?			
YES (II "YES." Ihrough Plant Variety Protection Act NO	Patent Act Give da	se1		
19 HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR	MARKETED IN THE U.S. CO.	THEO COUNTRIES		
YES (II "YES," give names of countries and dates)		STOCK COOM (KIES)		
NO		·		
	<u> </u>			
20 The applicant(s) declare(s) that a viable sample of basic s	seeds of this variety will	be furnished with the ag	plication a	nd will be replenished upon
request in accordance with such regulations as may be app	plicable.			* *
The undersigned applicants) is (are) the owner(s) of thi uniform, and stable as required in section 41, and is entiti Applicants) is (are) informed that false representation he	led to protection under t	he provisions of section 4:	2 of the Plai	that the variety is distinct, at Variety Protection Act.
SIGNATURE OF APPLICANT (Owner(s)	CAPACITY OR			DATE
Stur Harking	Soul	In Paraly	MAR	6/9/92
SIGNATURE OF APPLICANT (Owner(s))	CXFACITYON	15 0 P	, ,	DATE (
LUAND YVOUND	10 VUAL	ny myben 12	aller for	10 4

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), <u>ALL</u> of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) at least 2,500 viable untreated seeds; (4) check, drawn on a U.S. bank, payable to "Treasurer of the United States" in the amount of \$2,150 (\$250 filing fee and \$1,900 examination fee). (See section 180.175 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for 30 days, then returned to the applicant as unfiled. Mail application and other requirements to: Plant Variety Protection Office, AMS, USDA, Rm. 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the Application are self-explanatory unless noted below. Corrections on the Application form and Exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a Certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$250 for issuance of the Certificate.

Plant Variety Protection Office Telephone: 301/344-2518

ITEM

- 9. Give the date when there has been at least a tentative determination that the variety has been sexually reproduced with recognized characteristics, whether or not the novelty of those characteristics has been determined. [See section 41(d) of the Plant Variety Protection Act (Act).]
- 14a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability. (See sections 41 and 52 of the Act.)
- 14b. Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons which clearly indicate novelty.
- 14c. Exhibit C forms are available from the PVPO; specify crop kind. Fill in the Exhibit C (Objective Description of Variety form) to describe your variety.
- 14d. Optional additional characteristics and/or photographs: Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 14e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.
- 15. If "Yes" is specified (seed of this variety be sold by variety name only as a class of certified seed), the applicant may NOT reverse this affirmative decision after the variety has either been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified the applicant may change the choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 19. See sections 41 (i, j) and 42 of the Act and section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

NOTES:

It is the responsibility of the applicant/owner to keep the PVPO informed of any change of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is \$25. [See section 101 of the Act, and sections 180.130, 180.131, 180.132, and 180.175(h) of the Regulations and Rules of Practice.]

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Rm. 213, Building 306, Beltsville Agricultural Research Center -- East, Beltsville, MD 20705. Telephone: 301/344-2089.

FORM CSSO-470 (5-89) Reverse

EXHIBIT A

Origin and Breeding History of A2835

1985 Cross was made -- J851585

PARENTAGE: X1972*A3935 (X1972 = A2*Vickery)

1985-1986 $\,$ J851585 $\,$ F $_1$ and $\,$ F $_2$ generations were grown at Isabela, Puerto Rico. (winter)

1986 Plants of J851585 were grown in bulk at Ames, Iowa.

Individual plants of J851585 were grown in short rows at Ames, Iowa. Plants were selected from row J87-12930.

Sublines from J87-12930 were tested in progeny row yield test 88Y111. Entry 46 of 88Y111 was selected for high yield, and standability.

Entry 46 of 88Y111 was entered into the yield test 89R285 as entry 21. The 89R285 was grown at 6 locations in Iowa, Illinois, Indiana, Nebraska, and Michigan. Entry 21 was selected for high yield, uniformity, and standability and given the designation X2835.

1989-1990 100 single plants were grown in Isabela, Puerto Rico to begin the (winter) breeder seed process.

1990 X2835 was entered into yield tests in 18 locations throughout the Midwest. It was selected for high yield, uniformity, and standability and given the designation XP2835.

100 rows were grown in Ames from plants produced in Puerto Rico. Progeny of these rows were screened for resistance to race 3 of Phytophthora megasperma. Those progeny found to be uniform for resistance and appearance were bulked to form breeder seed lot D90-210-P.

1990-1991 Breeder seed was produced in Puerto Rico. (winter)

1991

XP2835 was entered in yield tests in 24 locations throughout the midwest. It was approved for release and full production and given the designation A2835.

Foundation seed of A2835 was produced near Perry, Iowa.

A2835 is uniform and stable within commercially acceptable limits. As with other soybean varieties, variants can occur for almost any characteristic during the course of repeated sexual reproduction.

EXHIBIT B

Novelty Statement concerning A2835 Soybean

To our knowledge the soybean varieties that most closely resemble A2835 are A2943, A2396, A2427, Corsoy 79 and Northrup King S29-39. Characteristics which differentiate A2835 include, but are not necessarily limited to, the following:

1. Hilum color:

A2835		Imperfect Black
A2943		Imperfect Black
A2396	=	Imperfect Black
A2427	_	Imperfect Black
Corsoy 79	_	Yellow
S29-39	_	Yellow

2. Resistance to race 3 of Phytophthora megasperma:

A2835	=	Resistant
A2943	=	Susceptible
A2396	****	Susceptible
A2427	***	Susceptible
Corsoy 79	===	Resistant
S29-39	-	Resistant

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY

NAME OF APPLICANT(S)	TEMPORARY		TY NAME	
round of the circuit (a)	TEMPORARY (
Asgrow Seed Co.	XP2835	A2	835	•
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip C 9635-190-23	ode)			AL USE ONLY
Gull Road	•	PVPO	NUMBER	
Kalamazoo Michigan 49001			92002	23
Choose the appropriate response which characterizes the in your answer is fewer than the number of boxes provide Starred characters * are considered fundamental to an add when information is available.	d, place a zero in	the first box when n	umber is 9 or les	s (e.g., 0 9).
4 0000 00400	(i) (i)			
	, ji			
11 1	w T			·
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2) 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)	•	erical Flattened (L/W rangate Flattened (L/T ran		
2. SEED COAT COLOR: (Mature Seed)				
1 = Yellow 2 = Green 3 = Brown	4 = Black	5 = Other (Specif		
SEED COAT LUSTER: (Mature Hand Shelled Seed)				
1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Ne	bsoy'; 'Gasoy 17')			
4. SEED SIZE: (Mature Seed)	<u>,</u>			
1 5 Grams per 100 seeds	• .			
5. HILUM COLOR: (Mature Seed)			······································	
5 1 = Buff 2 = Yellow 3 = Brown	4 = Gray !	5 = Imperfect Black	6 = Black	7 = Other (Specify)
6. COTYLEDON COLOR: (Mature Seed)		**		
1 = Yellow 2 = Green				
7. SEED PROTEIN PEROXIDASE ACTIVITY:	N15 115			
2 1 = Low 2 = High				
8. SEED PROTEIN ELECTROPHORETIC BAND:		····		
2 = Type A (SP1a) 2 = Type B (SP1b))			
9. HYPOCOTYL COLOR:				
1 = Green only ('Evans'; 'Davis') 2 = Green 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 7 4 = Dark Purple extending to unifoliate leaves ('Hodgso	1")	llow cotyledons (Wood	worth"; "Tracy")	
(10. LEAFLET SHAPE:				
3 1 = Lanceolate 2 = Oval 3 = Ova	ate 4 = ∩+	her (Soecify)		

3 = Ovate

4 = Other (Specify).

		the second second		<i>></i>	. • • • • • •
11. LE	AFLET SIZE:				
	1 = Small ('Amsoy 71'; 'A5312') 3 = Large ('Crawford'; 'Tracy')	2 = Medium ('Corsoy 7	79"; "Gasoy 17")		
12. LE.	AF COLOR:			,	
2	1 = Light Green ('Weber'; 'York') 3 = Dark Green ('Gnome'; 'Tracy')	2 = Medium Green (*C	orsoy 79'; 'Braxton')		
13. FL	OWER COLOR:				
2	- 7	3 = White with purple thr	oat		
14, PO	D COLOR:				
2	1 = Tan 2 = Brown 3 =	= Black			
15. PL	ANT PUBESCENCE COLOR:				
1	1 = Gray 2 = Brown (Tawny)				
16. PL	ANT TYPES:				
[3	1 = Slender ('Essex'; 'Amsoy 71') 3 = Bushy ('Gnome'; 'Govan')	2 = Intermediate ('Arr	ncor'; 'Braxton')		
17. PL	ANT HABIT:				
	1 = Determinate ('Gnome'; 'Braxton') 3 = Indeterminate ('Nebsoy'; 'Improved Pelican	2 = Semi-Determinate	('Will')	•	
18. MA	TURITY GROUP:			·	.
0	5 1 = 000 2 = 00 3 = 0 9 = VI 10 = VII 11 = VIII	4 = I 5 = II 12 = IX 13 = X	6= III 7 = IV	8 = V	
19. DI	SEASE REACTION: (Enter 0 = Not Tested; 1 = Susc	ceptible: 2 = Resistanti			
	ACTERIAL DISEASES:				
ъ Г	0 Bacterial Pustule (Xanthomonas phaseoli var. so	oiensis)			
* [Bacterial Blight (Pseudomonas glycinea)				
	Wildfire (Pseudomonas tabaci)				
FU	O_J INGAL DISEASES:				
* [Brown Spot (Septoria glycines)				
	Frogeye Leaf Spot (Cercospora sojina)				
* [O Race 1 O Race 2 O Race	3 0 Race 4	0 Race 5 0	Other (Specify)	
[Target Spot (Corynespora cassiicola)				
	Downy Mildew (Peronospora trifoliorum var. m	nanshurica)			
[0	Powdery Mildew (Microsphaera diffusa)				:
* [Brown Stem Rot (Cephalosporium gregatum)				
\ [O Stem Canker (Diaporthe phaseolorum var. caul.	livora)			6

19.	DISEA	SE REACTION	i: (Enter 0 = Not T	ested; 1 = Susceptible;	2 = Resistant) (Continued)		
	FUN	GAL DISEASE	S: (Continued)				
*		Pod and Sten	n Blight <i>(Diaporthe</i>	phaseolorum var; sojae)			
٠		Purple Seed S	Stain (Cercospora k	ikuchii)			
		Rhizoctonia	Root Rot (Rhizocte	onia solani)			
		Phytophthora	Rot (Phytophthor	'a megasperma var. sojae)		•
*	2	Race 1	2 Race 2	2 Race 3	Race 4	0 Race 6	Race 7
	2	Race 8	2 Race 9	Other (Specify)	!		
1.5	VIRA	AL DISEASES:					
4	0	Bud Blight (T	obacco Ringspot V	irus)			
•	0	Yellow Mosai	ic (Bean Yellow Mo	saic Virus)	e gradini se		
*	0	Cowpea Mosa	ic (Cowpea Chloro	tic Virus)		•	
		Pod Mottle (£	Bean Pod Mottle Vi	rus)	•		
*		Seed Mottle (Soybean Mosaic Vi	rus)			
	NEM.	ATODE DISEA	ASES:		•		
		Soybean Cyst	: Nematode (<i>Hetero</i>	dera glycines)			
*	1	Race 1	1 Race 2	l Race 3	Race 4 Other	Specify)	
	Q	Lance Nemate	ode <i>(Hoplolaimus C</i>	Colombus)			
*	0	Southern Roc	ot Knot Nematode (Meloidogyne incognita)			
*	0	Northern Roc	ot Knot Nematode !	Meloidogyne Hapla)			
	0	Peanut Root I	Knot Nematode (Ma	eloidogyne arenaria)			
	0	Reniform Ner	matode (<i>Rotylench</i> u	ulus reniformis)			
		OTHER DISE	ASE NOT ON FOR	RM (Specify):		+	
· 		· · · · · · · · · · · · · · · · · · ·					
20, (PHYSIO			0 = Not Tested; 1 = Susa	ceptible; 2 = Resistant)		_
~ . ^		Iron Chlorosis	on Calcareous Soil				
: '		Other (Specify	r)				· · ·
21.	INSECT	REACTION:	(Enter 0 = Not Tes	ted; 1 = Susceptible; 2 =	Resistant)	<u> </u>	
	0	Mexican Bean	Beetle (Epilachna	varivėstis)	•	·	
	0	Potato Leaf H	opper (Empoasca fa	abae)			
		Other (Specify	/)				
22. (INDICA	TE WHICH VA	RIETY MOST CLO	SELY RESEMBLES TI	HAT SUBMITTED		
	· · · ·	ACTER		OF VARIETY	CHARACTER	NI A B A I	
P	lant Sha	pe	A2872		Seed Coat Luster	A2872	E OF VARIETY
L	_eaf Sha _l	pe	A3935		Seed Size	A3935	
	eaf Colo	or	A3935		Seed Shape		
L	eaf Size		A3935		Seedling Pigmentation		
			I				

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO. SEEDS/
				CM Width	CM Length	% Protein	% Oil	SEEDS	POD
A2835 Submitted									
	135	1.7	85.3			41-2	20.2	14.9	
A2872 Name of									
Similar Variety	135	1.7	86.9			41.7	21.0	14.9	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

EXHIBIT D

Additional Description of the Variety

A2835 is a late maturity group II cultivar that possesses exceptional yield potential, excellent standability, multi-race phytophthora root rot resistance and outstanding appearance.

EXHIBIT E

Statement of the Basis of Applicant's Ownership

A2835 was originated and developed by Kevin W. Matson, Ph.D., an Asgrow plant breeder. By agreement between employee and Asgrow Seed Company, all rights to any invention, discovery, or development made by an employee are assigned to the Company. No rights to such invention, discovery, or development are retained by the employee.